

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1 – 16 (canceled)

17. **(original)** A low water peak, hydrogen resistant optical waveguide fiber, the fiber comprising:

a silica containing glass core; and

a glass cladding surrounding the silica containing glass core;

wherein the optical waveguide fiber exhibits an optical attenuation at a wavelength of about 1383 nm which is less than or equal to an optical attenuation exhibited at a wavelength of about 1310 nm; and

wherein the optical waveguide fiber exhibits a maximum hydrogen induced attenuation change of less than about 0.03 dB/km at a wavelength of 1383 nm after being subjected to a 0.01 atm hydrogen partial pressure for at least 144 hours.

18. **(original)** The optical waveguide fiber of claim 17, wherein the optical attenuation exhibited at a wavelength of about 1383 nm is at least 0.04 dB/km less than the optical attenuation exhibited at a wavelength of about 1310 nm.

19. **(original)** The optical waveguide fiber of claim 18, wherein the optical attenuation exhibited at a wavelength of about 1383 nm is less than or equal to about 0.35 dB/km.

20. **(original)** The optical waveguide fiber of claim 19, wherein the optical attenuation exhibited at a wavelength of about 1383 nm is less than or equal to about 0.31 dB/km.

21. (canceled)

22. **(currently amended)** The optical waveguide fiber of claim 17 ~~[[21]]~~, wherein the optical waveguide fiber exhibits a maximum hydrogen induced attenuation change of less than about 0.03 dB/km at a wavelength of about 1383 nm after being subjected to a 0.01 atm hydrogen partial pressure for at least 336 hours.

23. **(currently amended)** The optical waveguide fiber of claim 17 [[21]], wherein the optical waveguide fiber exhibits an optical attenuation of less than about 0.36 dB/km at each wavelength within a wavelength range from about 1300 nm to about 1600 nm.
24. **(currently amended)** The optical waveguide fiber of claim 17 [[21]], wherein the core is doped with germania.
25. **(currently amended)** The optical waveguide fiber of claim 17 [[21]], wherein the core and the cladding each have a respective refractive index which form a step-index profile.
26. **(currently amended)** The optical waveguide fiber of claim 17 [[21]], wherein the fiber is capable of single mode operation at 1550 nm.
27. **(currently amended)** The optical waveguide fiber of claim 17 [[21]], wherein the fiber has a cable cutoff wavelength of less than or equal to about 1260 nm.
28. **(currently amended)** The optical waveguide fiber of claim 17 [[21]], wherein the cladding glass comprises silica.
29. **(currently amended)** The optical waveguide fiber of claim 17 [[21]], wherein the fiber contains no fluorine-based dopant.
30. **(currently amended)** The optical waveguide fiber of claim 17 [[21]], wherein the glass core contains no fluorine-based dopant.
31. **(currently amended)** The optical waveguide fiber of claim 17 [[21]], wherein the glass cladding contains no fluorine-based dopant.
32. **(currently amended)** The optical waveguide fiber of claim 17 [[21]], wherein the fiber is formed from an OVD process.
33. **(currently amended)** The optical waveguide fiber of claim 17 [[21]], wherein the silica containing core glass includes a weighted average OH content of less than 1 ppb.

34. **(original)** A low water peak, hydrogen resistant optical waveguide fiber, the fiber comprising:

a silica containing glass core; and

a glass cladding surrounding the silica containing glass core;

wherein the optical waveguide fiber exhibits an optical attenuation of less than about 0.36 dB/km at each wavelength within a wavelength range from about 1300 nm to about 1600 nm after being subjected to a 0.01 atm hydrogen partial pressure for at least 144 hours.

35. **(canceled)**

36. **(original)** An optical waveguide fiber comprising:

a core region having a centerline and at least two segments having a positive relative refractive index, a refractive index profile, and an inner and an outer radius, the radii being measured with reference to the centerline;

a clad layer surrounding and in contact with the core region, the clad layer having a relative index and a refractive index profile;

wherein the optical waveguide fiber exhibits an optical attenuation at a wavelength of about 1383 nm which is not more than 0.10 dB/km above an optical attenuation exhibited at a wavelength of about 1310 nm.

37. **(currently amended)** The [[An]] optical waveguide fiber of claim 36 comprising:

~~a silica containing glass core; and~~

~~a glass cladding surrounding the silica containing glass core;~~

~~wherein the optical waveguide fiber exhibits an optical attenuation at a wavelength of about 1383 nm which is not more than 0.10 dB/km above an optical attenuation exhibited at a wavelength of about 1310 nm; and~~

wherein the optical waveguide fiber exhibits a zero dispersion at a wavelength greater than 1310 nm.

38. **(canceled)**

39. **(new)** An optical fiber communication system comprising the fiber of claim 17.